



# Illinois Department of Transportation

## Memorandum

**To:** Thomas R. Sancken                      Attn: Bill Raffensperger  
**From:** Kenneth R. Lang                      By: Terry McCleary  
**Subject:** Pavement Recommendations\*      ✓  
**Date:** August 11, 2004

FAP 326 (IL 47)  
Section (111 CS)W & RS-2,I  
Grundy County  
P93-058-02  
D3# 1514

Five pavement cores were taken for the above project between Chapin Street and Main Street. Four cores were taken in the outside lane and one core was taken in the painted median just off of the centerline of IL 47. Two of the four cores were taken in the southbound lane and the other two in the northbound lane. Below are the core descriptions and our recommendations.

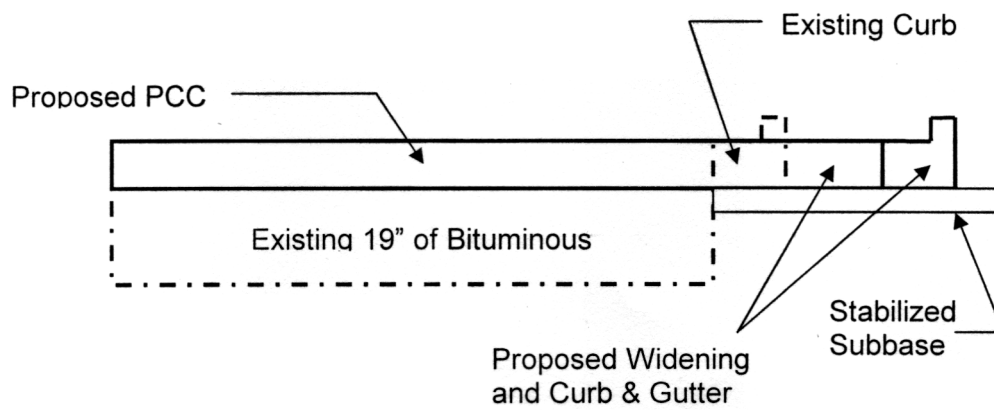
**Core #1**      SBL, 133' S. of Chapin Street, 2.25' east of the curb  
1 ¾" Bituminous Surface Course (Slag) in Fair Condition  
17 ¼" Bituminous Binder Course in Poor Condition, 80% completely stripped.

**Core #2**      SBL, 127' S. of Jackson Street, 7' east of the curb  
1 ¼" Bituminous Surface Course (Slag) in Good Condition  
1 ¾" Bituminous Binder Course in Good Condition  
1 3/8" Bituminous Binder Course in Good Condition  
2 1/8" Bituminous Binder Course in Good Condition  
3 1/8" Bituminous Binder Course in Good Condition  
2 ½" Bituminous Binder Course in Good Condition  
2 ¼" Bituminous Binder Course in Good Condition  
4 ¼" Bituminous Binder Course in Good Condition

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- Core #3        NBL, 106' N. of Jackson Street, 34" west of the curb  
                  1 ¼" Bituminous Surface Course (Slag), Very Porous  
                  3 ½" Bituminous Binder Course in Good Condition  
                  5 ½" Bituminous Binder Course in Good Condition  
                  8 ¼" Bituminous Binder Course in Good Condition
- Core #4        NBL, 139' N. of Chapin Street, 7.5' west of the curb  
                  1 ¼" Bituminous Surface Course (Slag) in Good Condition  
                  2 ¾" Bituminous Binder Course in Good Condition  
                  13 ½" Bituminous Binder Course in Good Condition
- Core #5        Median, 93' N. of Jackson Street, 3' west IL 47 centerline  
                  1 ¼" Bituminous Surface Course (Slag) in Good Condition  
                  2 ¼" Bituminous Binder Course in Good Condition  
                  3 ¾" Bituminous Binder Course in Good Condition  
                  6 ½" Bituminous Binder Course in Good Condition  
                  4 ¼" Bituminous Binder Course in Good Condition

We have resurfaced this portion of IL 47 numerous times over the last eight years. We have tried very hardy mixes, slag mix, and the pavement is still rutting under the traffic load. The vehicles are braking coming down the hill from the north and off the bridge from the south. In the opposite lanes, they are accelerating to get up the hill to the north and over the bridge to the south. We recommend milling and overlaying with concrete. The thickness of bituminous removal is contingent on proposed grade changes and PCC thickness.



# IL 47 between Benton St. & Main St.



Slag Surface

Mix in all cores

Areas

Stripped

Away

Core #1

#5